

# F-451

## Variable Area Flow Meter

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### Features

- > Polysulfone body resists high temperatures and pressures
- > In-line or panel mount configurations available
- > Indoor use only
- > Full Scale Accuracy +/- 3%
- > 316ss float & guide-wire

### Highlights

**Flow range**

0.5 - 40 GPM  
2.0 - 155 LPM

**Pressures up to**

150 PSI  
(10.3 bar)

**Max. fluid temp.**

212 °F  
100 °C

**Body**

Polysulfone

**Adapters**

1.0", 1.5" F/NPT  
and 50mm slip

**Warranty**

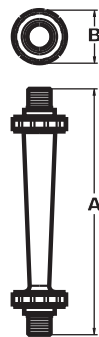
1 Year



<b>Maximum Working Pressure</b>	150 PSI (10.3 bar) @ 70 °F (21 °C)
<b>Maximum Fluid Temperature</b>	Standard units - 1" pipe: 212 °F (100 °C) @ 0 PSI Standard units - 1-1/2" pipe: 120 °F (49 °C) @ 0 PSI
<b>Full Scale Accuracy</b>	+/- 3%
<b>Calibration Fluid</b>	Water, specific gravity 1.0
<b>Scale Length</b>	6" (150mm)
<b>Environment</b>	Not for direct sunlight exposure
<b>Maximum Pressure Drop</b>	1 PSI
<b>Approximate Shipping Weight</b>	3 lb. (1.36 kg)

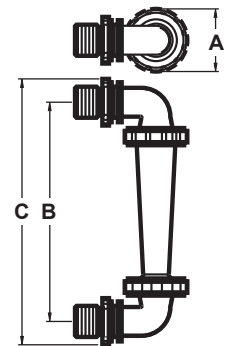
## Dimensions

Dim	Inch	cm
A	14-1/2"	36.83
B	3-5/16"	8.41



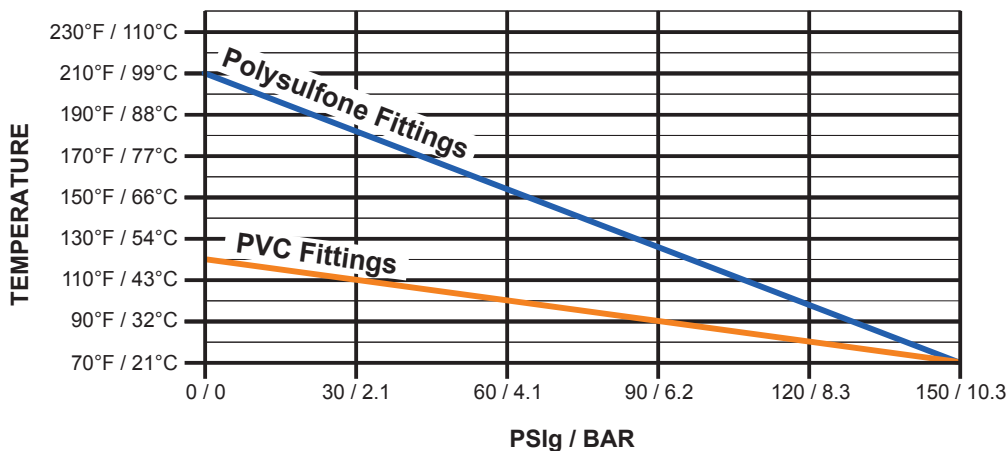
Vertical Inline Models

Dim	Inch	cm
A	3-5/16"	8.41
B	15"	38.1
C	17"	43.18



Panel Mount Elbow Models

## Maximum Temperature vs. Pressure



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## Non-wetted Components:

<b>Union Nuts</b>	Fiber reinforced nylon
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## Wetted Components:

<b>Meter Body</b>	Polysulfone
<b>Adapters</b>	1" pipe: Polysulfone, F/NPT or elbow M/NPT
	1.5" pipe: PVC, F/NPT
<b>Guide Rod Holder</b>	Polysulfone
<b>O-ring Seals</b>	Viton® (optional EP)
<b>Float</b>	316SS or PTFE (varies per model)
<b>Guide Rod</b>	316SS
<b>Optional Shield</b>	Polycarbonate

## Output Specifications

Model	Feed Rate		Max Pressure	Max Temperature	Float Material
	GPM	LPM	PSI (bar)	°F (°C)	
F-451006L	0.5–6	2–22	150 (10.3)	70 (21)	Teflon
F-451001L	1.0–10	4–40	150 (10.3)	70 (21)	316SS
F-451002L	2.0–20	6–76	150 (10.3)	70 (21)	316SS
F-451003L	3.0–30	23–115	150 (10.3)	70 (21)	316SS
F-451004L	4.0–40	15–155	150 (10.3)	70 (21)	316SS

# Model Number Matrix

## F-451 Model Number

<b>F</b>	Flow Meter					
<b>Series</b>						
	<b>451</b>	F-451 Polysulfone body				
<b>Scale</b>						
	<b>006</b>	0.5 - 6 gpm (2 - 22 lpm) Teflon Float				
	<b>001</b>	1 - 10 gpm (4 - 40 lpm) 316ss Float				
	<b>002</b>	2 - 20 gpm (6 - 76 lpm) 316ss Float				
	<b>003</b>	3 - 30 gpm (12 - 115 lpm) 316ss Float				
	<b>004</b>	4 - 40 gpm (15 - 155 lpm) 316ss Float				
<b>Guide-Wire Material</b>						
	<b>LHN</b>	316 Stainless steel rod				
<b>Special</b>						
	<b>(Blank)</b>	Standard meter				
<b>Adapter</b>						
	<b>(Blank)</b>	1.0" Female NPT, Polysulfone				
	<b>-24</b>	1.5" Female NPT, PVC				
	<b>E</b>	90° Elbow 1.0" Male NPT , Polysulfone				
<b>O-Ring</b>						
	<b>(Blank)</b>	Viton				
	<b>-22R</b>	EP				
<b>F</b>	<b>-</b>	<b>451</b>	<b>006</b>	<b>LHN</b>		<b>Sample Model Number</b>

\*In-house NIST Calibration, OEM packaging and silicone oil free options are also available.

### Optional Accessories and Components

**Polycarbonate Shield Kit KIT-SHS**  
 (Includes shield and two adapters. Some assembly required.)